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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,088	03/02/2004	Michael Diesler	2002P18158US	2926

7590 08/15/2005

SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPT.
170 WOOD AVENUE SOUTH
ISELIN, NJ 08830

EXAMINER

EDGAR, RICHARD A

ART UNIT	PAPER NUMBER
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3745

DATE MAILED: 08/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

8P

Office Action Summary	Application No. 10/791,088	Applicant(s) DIESLER ET AL	
	Examiner Richard Edgar	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/2/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-9, and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 2,552,239 (Warren hereinafter).

Warren discloses a method for cooling thermally stressed regions in a turbo machine, comprising: flowing a flow medium through the turbomachine 28 and exiting the flow medium in an exhaust steam region 33 during operation of the turbomachine, flowing a portion of the flow medium from a live steam feed line 30 to a heat exchanger 38; cooling the flow medium by the heat exchanger 38 before the flow medium enters the turbo machine 28; flowing the cooled flow medium into the turbomachine via an inflow region 26a; and cooling the thermally stressed regions that are located in the inflow region 26a by the flow medium that has been cooled by the heat exchanger.

The heat exchanger 38 is located in the exhaust steam region of the turbomachine 28.

The portion of the flow medium that enters the heat exchanger 38 is removed downstream of a shut off valve 31 located in the live steam feed line 30.

The temperature of the portion of the flow medium cooled in the heat exchanger 38 is at least 20 degrees Celsius (68 degrees Fahrenheit) below the temperature of the live steam (see col. 1, lines 60-62).

Warren also discloses in Figs. 1 and 2, a turbo machine comprising: a live steam feed line 30 through which a flow medium flows and leading to a live steam inflow region 6, the live steam feed line having a branch with which part of the flow medium is passed via a line 37 to a heat exchanger 38; an exhaust steam region 33; and a feed line 39 arranged downstream of the heat exchanger 38 leading into an inflow region 26a of the turbo machine.

The heat exchanger 38 is arranged in the exhaust steam region 33 of the turbo machine.

The live steam feed line 30 has a shut-off valve 31 located upstream of the branch.

Warren similarly discloses in Figs. 1 and 2, a turbo machine having selectively cooled internal components, comprising: a live feed flow line 30 that flows a medium through a turbo machine 28 and exits into an exhaust region 33; a branch line 37 to

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extend from the live feed line 30 adapted to pass a portion of the flow medium to a heat exchanger 38; and a feed line 39 arranged downstream of the heat exchanger 38 leading into an inflow region 26a of the turbomachine 28.

The heat exchanger 38 is located in the exhaust steam region 33 of the turbo machine.

The live steam feed line 30 has a shut-off valve 31 located upstream of the branch.

Claims 1, 3, 6, 7, 9, 10, 11, 13 and 14 rejected under 35 U.S.C. 102(b) as being anticipated by European Patent Application No. 1 152 125 (European patent application hereinafter).

The European patent application discloses a method for cooling thermally stressed regions in a turbomachine comprising: flowing a flow medium through the turbomachine 10 and exiting the flow medium in an inherent exhaust steam region during operation of the turbomachine, flowing a portion of the flow medium from a live steam feed line 14 to a heat exchanger 17; cooling the flow medium by the heat exchanger 17 before the flow medium enters the turbo machine 10; flowing the cooled flow medium into the turbomachine via an inflow region 26; and cooling the thermally stressed regions that are located in the inflow region 26 by the flow medium that has been cooled by the heat exchanger 17.

The portion of the flow medium that enters the heat exchanger 17 is removed downstream of a shut off valve 15 located in the live steam feed line 14.

The portion of the flow medium cooled by the heat exchanger 17 is passed to a thrust-compensating piston 36.

The European patent application also discloses in Fig. 1, a turbo machine 10 comprising: a live steam feed line 14 through which a flow medium flows and leading to a live steam inflow region 23, the live steam feed line having a branch with which part of the flow medium is passed via a line 16 to a heat exchanger 17; an inherent exhaust steam region downstream the blades 12; and a feed line 33 arranged downstream of the heat exchanger 17 leading into an inflow region 26 of the turbo machine.

The live steam feed line 14 has a shut-off valve 15 located upstream of the branch.

The feed line 33 supplies flow to a thrust-compensating piston 36.

The European patent application similarly discloses in Fig. 1, a turbo machine 10 having selectively cooled internal components, comprising: a live feed flow line 14 that flows a medium through a turbo machine 10 and exits into an inherent exhaust region; a branch line 16 to extend from the live feed line 14 adapted to pass a portion of the flow medium to a heat exchanger 17; and a feed line 33 arranged downstream of the heat exchanger 17 leading into an inflow region 26 of the turbomachine 10.

The live steam feed line 14 has a shut-off valve 15 located upstream of the branch.

The feed line 33 downstream of the heat exchanger 17 supplies flow to a thrust-compensating piston 36.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Edgar whose telephone number is (571) 272-4816. The examiner can normally be reached on Mon.-Thur. and alternate Fri., 7 am- 5 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Richard Edgar
Examiner
Art Unit 3745

RE